

Asian Gypsy Moth Vessel Inspection Guidelines

The purpose of the emergency action is to prevent the artificial spread of Asian Gypsy Moth (AGM), *Lymantria dispar*, from high-risk areas—Far East Russian ports where AGM populations are at high densities. Inspection and exclusion of contaminated ships will prevent the artificial spread of AGM.

The AGM displays significant behavioral differences compared to the North American gypsy moth (NAGM). The female AGM is an active flyer that is attracted to lights, and capable of flying up to 25 miles. The AGM feeds on larch and other conifers as well as on alder and willow. Oaks and other hardwood species are also acceptable hosts.

The female AGM lays eggs during August and September in Far East Russian ports. Attracted by the lights on ships, the females may lay eggs on the superstructure. The larvae can be blown by the wind short distances on silk strands. Due to these characteristics, a list of vessels which called in Far East Russian ports during August and/or September of the previous year has been developed: the AGM Vessel Alert List.

APHIS has asked shipping interests not to charter ships that called at Far East Russian ports during the egg laying period for voyages that would put the ships in U.S. or Canadian ports during the high-risk egg hatching period. Any ship that arrives during this period that is found infested will be ordered to leave U.S. waters immediately.

Although APHIS has no regulation prohibiting the entry of AGM high-risk ships, the Plant Protection Act grants the authority to order infested ships to leave U.S. waters.

Determine Status of Arriving Ships

Determine which ships should be excluded entry, which should be boarded on arrival, and which require normal, non-AGM boarding procedures. These procedures use two types of exclusion: (1) If a pest is found, PPQ has the authority to order a ship to leave U.S. waters (a mandatory exclusion); and (2) PPQ has asked the shipping industry not to bring ships which have been in Far East Russian ports during August or September of the previous year into U.S. ports during the high-risk hatching period. This is a voluntary exclusion. A narrative description of the main steps involved in determining your action follows. See Table 3-3-16, and Table 3-3-17 which summarize the action.

EXEMPTION: Hawaii, Puerto Rico, and Guam are exempt from excluding entry to ships because the climate and host conditions are not suitable for AGM. Therefore, throughout the year, ships from Far East Russian ports are allowed to arrive in Hawaii, Puerto Rico, and Guam subject to inspection.

Southern ports need to be more aware of AGM inspection of ships year round. There is a possible risk of larvae hatching in these warmer climates even during the months which are not considered the high-risk hatching period.

Step 1: Check the AGM Vessel Alert List

Check the AGM vessel alert list for the ship's name and hull number to determine if the ship is high risk for AGM. The AGM vessel alert list includes ships that called at a Far East Russian port July 15 through September 30 of the previous year.

If a ship arrives that has a name very similar to one on the alert list, check with the agent to verify the hull number or the itinerary of the ship during July, August, and September of the previous year. The alert list is not all inclusive, so apply the ship risk criteria to all arrivals (Step 3).

The alert list of AGM suspect ships will be entered in the U.S. Coast Guard's look out data base (MSIS). The U.S. Coast Guard will notify the local CBP office when an AGM suspect ship reports to a port.

Step 2: Check the Ship's Itinerary

Check the ship's itinerary for a Far East Russian port that occurs within the range from Posyet to Nikolayevsk. The three most likely ports are Nakhodka, Vladivostok, and Vostochnyy. Refer to definitions in the Introduction for a non inclusive list of ports of the high-risk area. Northern Chinese ports, Japanese ports, and Korean ports may also be suspect. Verify when the ship called at the Far East Russian port. Did it call at the port between July 15 and September 30?

Step 3: Apply Criteria to Arriving Ships

High-risk Ships—Determine which arriving ships are high risk and are excluded entry. These ships can be boarded instream or at preapproved remote sites.

Consider high risk a ship arriving at a continental U.S. port during March, April, May, June, July, or August and one of the following conditions exist:

- Specifically identified on the AGM vessel alert list
- Itinerary included a Far East Russian port where the ship called between July 15 and September 30 of the previous year
- Russian flag and an itinerary that cannot adequately verify the location of the ship between July 15 and September 30 of the previous year

Low-risk Ships—Determine which arriving ships are low risk and are allowed to proceed to the intended berth for initial AGM inspection and follow-up monitoring, if necessary.

Consider low risk a ship arriving at a continental U.S. port during January, February, September, October, November, or December, and with **one** of the following:

- Specifically identified on the AGM vessel alert list
- Itinerary including a Far East Russian port where the ship called during August or September of the previous year
- Russian flag and an itinerary that cannot adequately verify the location of the ship during August, or September of the previous year

Exclude Entry to High-Risk Ships

Every effort should be made to encourage voluntary exclusion of ships identified as high-risk AGM ships arriving at a U.S. port during the high-risk hatching period.

During the high-risk hatching period, inspection can be accomplished by boarding instream or at preapproved sites. Provide options to inspect or to conduct an initial evaluation at a remote location. This option provides the mutual benefit of reducing the risk of pest introduction and of saving money for the shipping industry by reducing the possibility of a ship being ordered out of U.S. waters after traveling inland waterways. Boarding a ship instream is an option which must be requested by the agent and approved by CBP. All arrangements concerning transportation to the ship and the method of boarding should be confirmed before the trip to the ship begins.

If the ship is found to be free of suspect AGM egg masses and larvae, allow the ship to proceed to its intended berth. While in port, monitor the ship daily for hatching AGM larvae.

See Table 3-3-16, which summarizes the procedures for determining which action to take for arriving ships.

TABLE 3-3-16 Procedures to Follow for Ships Arriving During High-Risk Period

If the ship is arriving:	And the ship's name is:	And the itinerary:	And called at Russian port(s):	And certification ¹ :	Then:
March April May June July August (high-risk hatching period)	Not on the alert list	Includes a Russian Far East port	In July, August or September	Is absent	Encourage voluntary exclusion Provide options for inspection outside the port area
				Is present	Allow movement to berth
		Does not include a Russian Far East port	Other than July, August or September		Board on arrival or at sunrise
					Require standard non-AGM boarding procedures
	On the alert list	Cannot be ascertained and it's a Russian flag ship			Encourage voluntary exclusion Provide options for inspection outside the port area
				Is absent	
				Is present	Allow movement to berth Board on arrival or at sunrise
Other than a month above					Go to Table 3-3-18

¹Certificate must be from the State Plant Quarantine Service of Russia and declare that the vessel is free of Asian gypsy moth (AGM).

TABLE 3-3-17 Action to Take with Ships Arriving During Low-Risk Period

If the month is:	And the ship's name is:	And the ship's itinerary:	Then:
January, February, September, October, November or December (low-risk hatching period)	On the alert list		Allow movement to berth Board on arrival or at sunrise
	Not on the alert list	Includes a Far East Russian port	
		Does not include a Far East Russian port	Require normal non-AGM boarding procedures
		Cannot be ascertained and it's a Russian flag ship	Allow movement to berth Board on arrival or at sunrise

Board Instream—Boarding ships instream is a nonstandard procedure. If instream boarding has been approved, then use the following guidelines:

1. Request the ship's agent or the U.S. Coast Guard (at particular sites) to arrange for and provide boarding and retrieval launch, and a suitable boarding method. U.S. Coast Guard units at ports without sufficient resources to transport CBP officers can provide CBP with a list of certified, commercial marine taxis or launch services.
2. Wear a U.S. Coast Guard approved flotation jacket.
3. Board the ship on arrival, within 1 hour after sunrise and 3 hours before sunset.
4. Board by conventional gangway or another method judged safe by the boarding officers.

Order a Ship to Leave—When ordering a ship to leave U.S. waters, issue PPQ Form 523, Emergency Action Notification (see Table A-1-29 for instructions on completing the form). Request the ship's master to prepare for and execute an immediate departure. The notification will instruct the ship's agent to immediately call out necessary tugs, linesmen, and pilots for the ship's departure. The only actions allowed are those that make the ship seaworthy, such as bunkering.

Board Low-risk Ships—During the low-risk period, suspect AGM ships are boarded on arrival or within 1 hour of sunrise if arriving during the night. Inspect

all accessible areas of the ship's super-structure. Use binoculars to inspect unreachable areas of the ship. Inspect the ship's hold(s) when there are indications (physical evidence on the superstructure or ship records) that the ship has been cleaned for AGM. If possible, at least two officers should conduct the inspection.

Inspect Suspect AGM Ships

Step 4: Look for Egg Masses

Egg masses are the most likely life stage to be found on the superstructure of ships. During March through August, hatching larvae can be found. Hatching larvae present an unacceptable pest risk any time of the year at any U.S. port.

Use USDA/APHIS Program Aid Number 1329, Don't Move Gypsy Moth, for identifying life stages of gypsy moths.

The following points will help you detect gypsy moths:

- Egg masses normally are deposited in sheltered locations such as in crevices or cavities, under traps, and behind walls and doors.
- Binoculars may allow you to see unreachable areas of the ship.
- Female AGMs are attracted to light; therefore, the female moths could lay their egg masses on surfaces of the ship that are exposed to night lights. However, if the ship was lit with shore-based flood lights while in a Far East Russian port, egg masses could be found in all locations.
- Viable egg masses on ships may be weathered, darkened, and appear old
- Look for evidence of fresh paint covering scrapes on walls or painted over egg masses.
- Look for hatching larvae that may be blowing on silk strands from the ship. Peak hatching of eggs is in the morning. Dispersing larvae move toward vertical structures and climb rapidly.

Use Table 3-3-18 to determine action to take when inspecting suspect AGM ships or ships with Far East Russian ports of call.

TABLE 3-3-18 Inspect AGM Ships or Ships with Russian Far East Ports of Call

If the month is:	And you find:	Then:
March, April, May, June, July or August (high-risk hatching period)	Egg masses or hatching larvae	Contact PPQ, QPAS through appropriate channels, who may instruct you to order the ship to leave (refer to the guidelines under Order a Ship to Leave)
	No life stages of AGM	Allow the ship to dock and conduct business Require daily monitoring for hatching larvae of AGM until the ship leaves the U.S. port
January, February, September, October, November or December (low-risk hatching period)	Egg masses	Contact PPQ, QPAS through appropriate channels, who will determine final regulatory action based on level of infestation and guidance from management.
	Hatching larvae	Contact PPQ, QPAS through appropriate channels, who may instruct you to order the ship to leave (refer to the guidelines under Order a Ship to Leave)
	No life stages of AGM	Allow the ship to dock and conduct business Monitor the ship while in port

Step 5: Treat Egg Masses

If required by PPQ, QPAS, drench the egg masses with Golden Pest Spray Oil registered for gypsy moth. This product is available from Stoller Enterprises, Inc., 4001 W. Sam Houston Pkwy N., Houston, TX 77043-1213; telephone number (713) 461-4407, FAX (713) 461-4467.

Application Technique—Mix equal amounts of Golden Pest Spray Oil and water and apply to egg masses as a 50% mix. Make a new mix each day treatments are made. Using a small hand sprayer, apply the mixture to individual egg masses until they are completely saturated. Keep the mixture agitated while treating.

Establish contingency plans for quick availability of commercial spray equipment for large applications. Port Directors should work with port authorities and/or ships' agents to arrange for commercial pesticide applicators to be on standby in the event they are needed to apply the treatment. Commercial application will be at the expense of the agent, ship, or port authority.

If a sample of egg masses is needed for identification, then remove a few egg masses from the ship. Using a knife, paint scraper, or putty knife, scrape a few egg masses from the ship's surface and place into a container. Be careful not to drop egg masses into the water.

Properly preserve, package, and send larvae to the Otis CPHST laboratory for confirmation through DNA analysis. Address the interceptions:

Asian Gypsy Moth Analysis
Otis Plant Protection Laboratory
USDA/APHIS
Building 1398
Otis ANGB, MA 02542
Telephone 508-563-9303

Step 6: Monitor Ships

Monitor ships daily that have been allowed to dock until they leave the port.

Peak hatching of gypsy moth eggs is in the morning. Check the ship for dispersing larvae. These larvae move toward vertical structures and climb rapidly.

Step 7: Report Inspection Results

To report inspection results, do as follows:

1. Each CBP Office must report inspection results to PPQ, QPAS. FAX these results within one week to (301) 734-5269. Please include a copy of PPQ Form 288 and all pertinent paperwork (like the Certificate of Inspection from Russia and the official itinerary from the Captain).
2. Clearly identify the information with the title, "AGM Ship Inspection."
3. Include the following information regarding AGM ship inspections:
 - Ship Name
 - Flag
 - Port
 - Date of Inspection
 - Result of Inspection—positive (life stage found) or negative (action taken)—brief statement

PPQ Form 288, Ship Inspection Report, can be used to document the above information. Note in Remarks the results of inspection and the action taken.